

**LIGHTNIN**

AN SPX BRAND

# Series 70 Mixer

## The LIGHTNIN Workhorse



**SPX**®

# The Most Experienced Mixer Technology in the World - LIGHTNIN Series 70

Over 30,000 LIGHTNIN Series 70 mixers have been placed in service since we began manufacturing them in 1970. The same design technology is used in LIGHTNIN Series 90 Mixers, as well as in RMX and most CMX placement drives for older mixers. The gear train is the same as in our Series 80 Mixers. That makes the Series 70 mechanical design technology the most specified, most used, and most proven mixer technology in the world. It's our standard and the standard of the industry

## 1 - 200 hp

LIGHTNIN Series 70 Mixers cover the range from 1 - 200 hp. They are available in both double and triple reduction gearing, and come in a full range of standard AGMA speeds from 280 down to 16.5 rpm.

## Full Spectrum of Impellers

Series 70 Mixers offer a full choice of impellers in order to optimize your process results. Included are the high-flow A310, as well as other high performance and more traditional impellers, so we can match shear and flow to your process requirements exactly.

## Guaranteed Performance

Together we decide what mixing should do to optimize your process. Then we recommend the impeller, mixer speed, shaft length and other specifications. And we guarantee performance results.

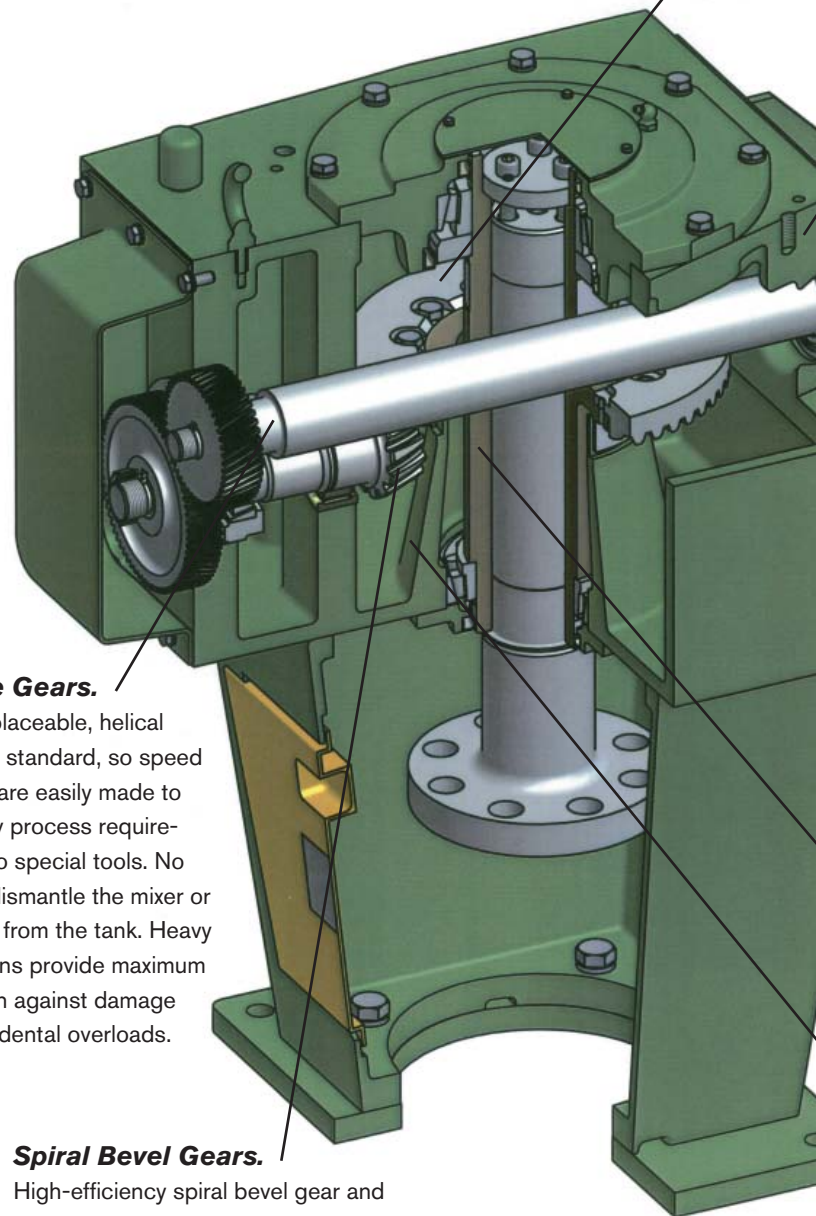
## Tested 100%

We employ a non-load test run on every Series 70 and Series 80 before they are shipped.

### ***Mechanical Seals.***

The replaceable cartridge design, a LIGHTNIN original, is standard on Series 70 units. Light in weight. Easy to replace. No other design offers so much convenience. Integral stuffing box and open tank designs also available.

## LIGHTNIN SERIES 70



### ***Change Gears.***

Easily replaceable, helical gears are standard, so speed changes are easily made to meet new process requirements. No special tools. No need to dismantle the mixer or remove it from the tank. Heavy wall pinions provide maximum protection against damage from accidental overloads.

### ***Spiral Bevel Gears.***

High-efficiency spiral bevel gear and pinion are quiet running. They are precision generated, match lapped, individually mounted and micrometer checked to make sure.

**Positive Direct Drive.**

Mixer shaft slides directly into the quill, where it is rigidly coupled by a key and keyway. This design is the veteran of millions of hours of mixing.

**Coupling Guards.**

Coupling guards meet OSHA standards and protect people from moving parts.

**Motor Mount.**

Standard mount assures positive alignment for foot mounted motors.

**Beyond AGMA.**

Bearings are sized far beyond AGMA requirements to minimize maintenance and provide long service life.

**Pedestal Cover.**

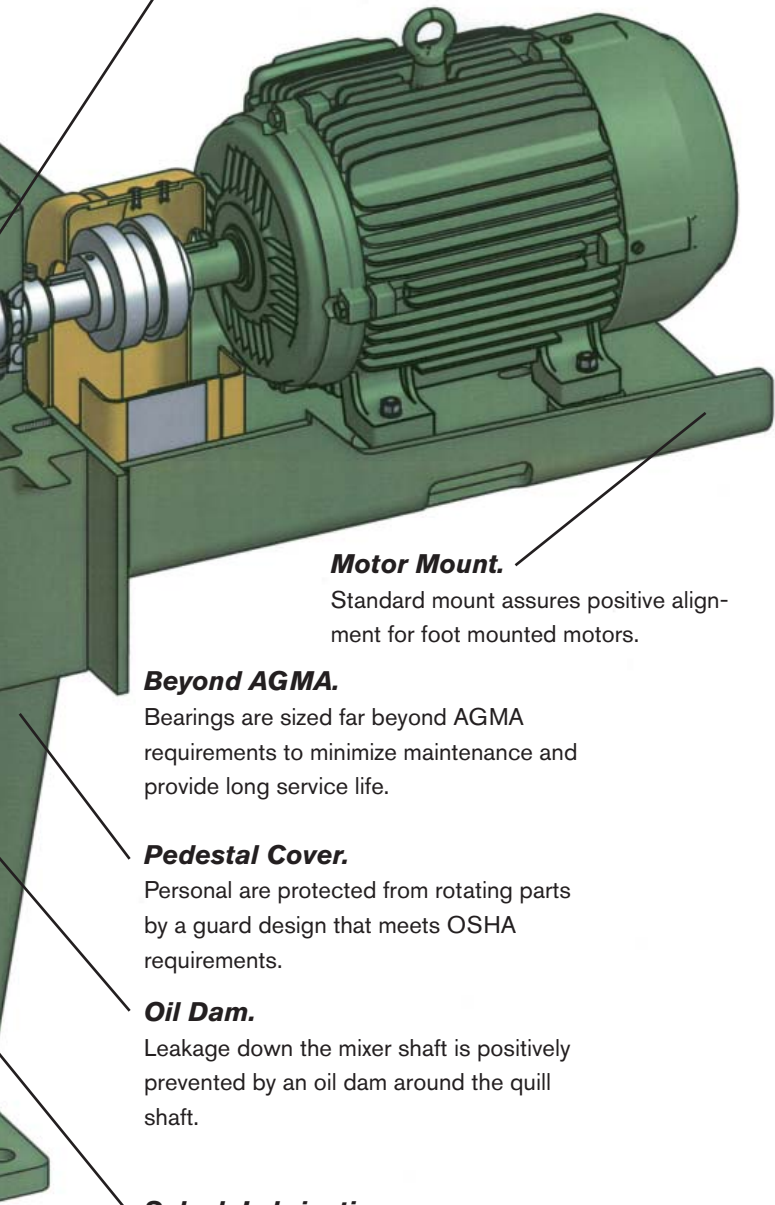
Personal are protected from rotating parts by a guard design that meets OSHA requirements.

**Oil Dam.**

Leakage down the mixer shaft is positively prevented by an oil dam around the quill shaft.

**Splash Lubrication.**

Rotating gears dip into the oil sump and assure a constant flow of oil to all surfaces. No need for pumps or piping.



## Series 70 Integral Stuffing Boxes

The standard Series 70 stuffing box combines a split lantern ring, split packing gland and seven rings of packing with separators.

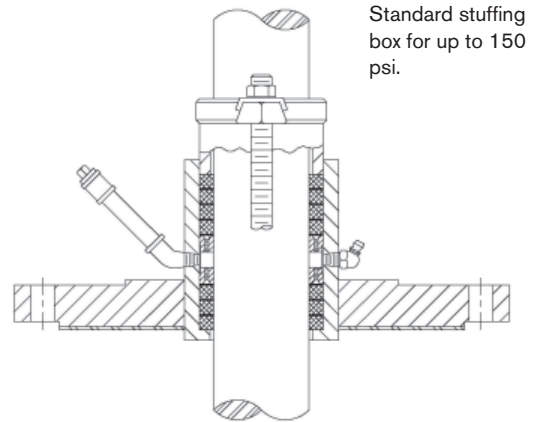
The lantern ring distributes lubricant for better sealing performance. All fits are dowl or rabbet to assure alignment. You'll find this LIGHTNIN design makes for easy repacking.

## Variable Speed Drives

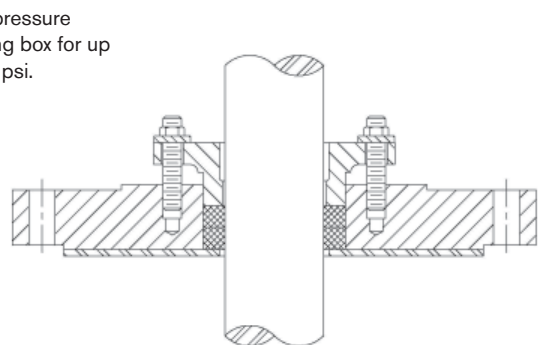
The LIGHTNIN Vari-Mix is offered on Series 70 mixers where speed variations are needed. It is a compact, enclosed, in-motion control unit, created especially for mixer service.

## Open Tank Models

Series 70 models for open tanks require minimum headroom to simplify installation.



Standard stuffing box for up to 150 psi.



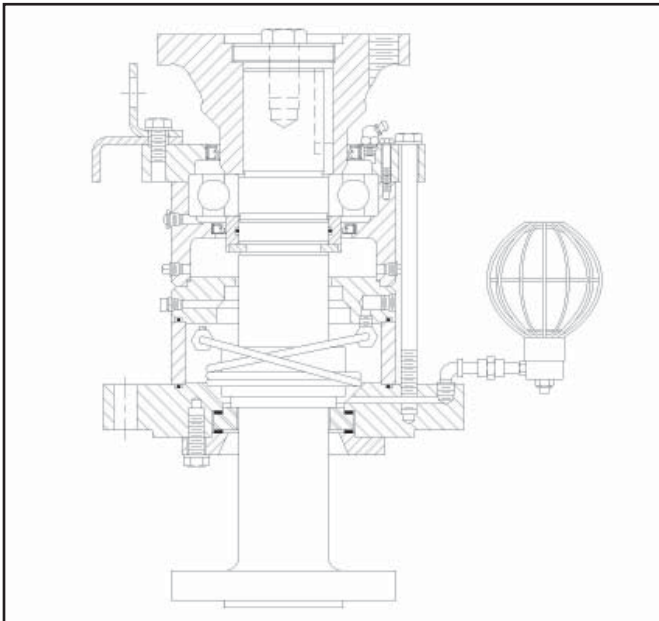
Low pressure stuffing box for up to 25 psi.

## Exclusive Mechanical Seal Design

Series 70 mechanical seals incorporate all the many significant improvements originated by LIGHTNIN over the years.

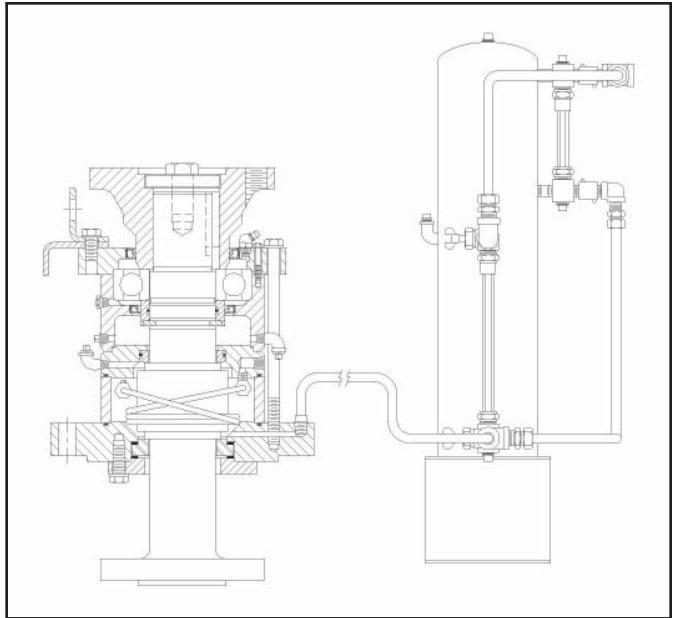
Each is tested 100% before shipment. No on-the-tank alignment, adjustment, or run-in is needed. Seals are self-setting by means of springs that position the faces for equal compression.

Seal and bearing lubricants are completely separate. Each has its own inlet and outlet. Ordinary tap water can be circulated around the seal housing for cooling.



### **Single Seal With Constant Level Lubricator**

Bulb sight glass shows level and serves as a reservoir to automatically feed lube to the seal.



### **Double Seal With Dead End Lubricator**

A trouble free unit with no moving parts. This lubricator seal provides constant pressure for the seal lubricant. It also provides a standby reservoir, so your mixer can continue operating while main reservoir is refilled.

# SPX<sup>®</sup>

## PROCESS EQUIPMENT

Your local contact:



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For more information about our worldwide locations, approvals, certifications, and local representatives, please visit [www.spxpe.com](http://www.spxpe.com).

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